Appl. No. 10/718,231

Amdt. Dated December 16, 2004

Reply to Office Action of September 23, 2004

REMARKS:

Applicant appreciates the time and care the Examiner has taken in examining the application. In making amendments, care has been taken to avoid introduction of new matter and to ensure the claims remain supported by the specification.

It is submitted that the objections have been met by the amendments above.

The rejections under Sections 102(b) and 103(a) are respectfully traversed for at least the following reasons. In independent claim 1 presented above, it is specified that the area of the image sensor is provided with a first light receiving area, which is set to be larger than the reflection light image, and a second light receiving area surrounding the first light receiving area. In the image sensor of the present invention, the first light receiving area and the second light receiving area thus can be changed. This is not so in the device described in Wiklund et al., U.S. Patent No. 5,313,409. Wiklund et al. discloses location-sensitive detectors, shown in Figs. 5 and 6. The detector of Fig. 5 is configured with a plurality of segments 31, 32, 33, and 34. Each of these segments is divided into a plurality of sectors, such as 32a, 32b, and 32c. The detector illustrated in Fig. 6 is configured with a plurality of inner detector units 35, 36, 37, and 38, and a plurality of outer detector units 39, 40, 41, and 42. However, both of the detectors shown in Figs. 5 and 6 are divided location sensitive detectors, and only determine the position of the instrument light. The size of each sector, size of

each inner detector unit, and size of each outer detector unit provided in the location-sensitive detectors shown in Figs. 5 and 6 is fixed, and cannot be changed. Accordingly, the image sensor of the present invention, in which the areas of the first light receiving area and the second light receiving area can be changed, is fundamentally different from the location sensitive detectors disclosed by Wiklund et al., in a manner that renders the pending claims novel and non-obvious over the cited references Wiklund et al. and Muraoka et al.

It is therefore submitted that the cited art neither discloses nor suggests the claimed invention, that the claims are allowable over the cited references, and that all requirements, rejections and objections have been met. Early, favorable treatment of this application is requested.

Authorization is hereby provided to charge any fees, or credit any overpayment, in connection with this transmittal to Deposit Account No. 50-0305 of Chapman and Cutler LLP, including charging of fees for any necessary extension of time, which is hereby requested. The examiner is encouraged to telephone the undersigned attorney for applicant with any questions or comments.

Respectfully submitted,

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Date: December 16, 2004
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CERTIFICATE OF FACSIMILE TRANSMISSION UNDER 37 CFR § 1.8

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Correspondence Attached:

Amendment and Response to Office Action

I hereby certify that the attached correspondence referenced above was transmitted by facsimile on the date listed above, to the U.S. Patent Office at the facsimile number listed above, under 37 C.F.R. § 1.8.

Typed Name of Person Signing this Certificate: Robert J. Schneider

Date of Signature:

December 16, 2004